

Area 1

- Location of springs/aquifer limits development potential
- Can water resource be feasibly transferred/piped to east?
- Development opportunity along roadway – West Valley Gateway/Welcome to Grantsville
- Clustered Development depends on access to water and sewer

Area 2

- Residential/neighborhood development has good potential
- Depends on access to water and sewer – can linkage be established with Stansbury Park or similar?
- Development limitations of existing airport must be honored
- Long-term expansion of airport and related impacts must be considered and planned
- Linking existing subdivisions/patterns of development with new development models (clustered development) is challenging
- Can provide unified link between Grantsville and Tooele

Area 3

- Lake Point has been planned for coordinated development/ partially approved
- Water rights north of Grantsville – can it be conveyed here? If so, what is impact on area surrounding water source?
- Important gateway and entry to valley – East Valley Gateway/Welcome to Tooele Valley

Area 4

- Erda – development agreements in existence for most of area
- Little to no potential for change without agreement of property owners
- Assume it is out of bounds?

Area 5

- Pine Canyon – primarily developed with available water rights
- Little to no potential for change?
- Assume it is out of bounds?

Area 6

- Contaminated land
- Little development potential
- Is clean up warranted?
- Protection of Stockton Bar essential – how to achieve?

Area 7

- Similar to Area 8
- Low density development/ use of septic assumed depending on access to water
- Rural development most likely scenario
- Unlikely to develop quickly
- Should additional development sustainable? Should it be supported?

Area 8

- Similar to Area 7
- Possible value for industrial development, depending on access to water/need for direct transportation linkage
- Unlikely to develop quickly
- Should additional development sustainable? Should it be supported?

Area 9

- Good location for industry
- Topography limits extents
- Depends on access to water/need for direct transportation linkage
- Unlikely to develop quickly
- Should additional development sustainable? Should it be supported?

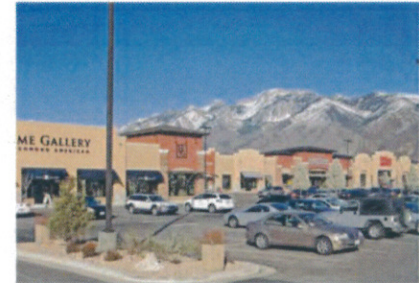
Appendix C:

Land Use Principles – Original Boards & Assessment of Public Input

Copies of the original Land Use Principles boards presented at the Public Workshop in September 2015 follow. These were reviewed by members of the public, who also provided input on the most representative and non-representative images for each (presented in Chapter 2). The result of this input was critical for developing planning concepts and for ensuring that the final plan was aligned with the public vision for the Tooele Valley.

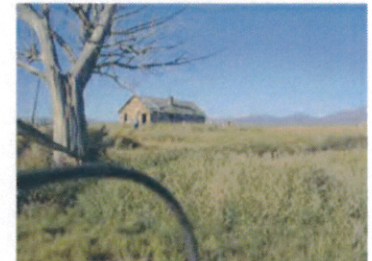
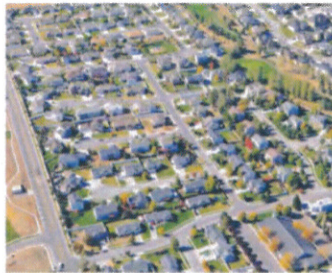
LAND USE PRINCIPLE:

- 1 Create density and intensity near cities, services, and gathering places, including schools and city centers.



LAND USE PRINCIPLE:

- ② Use flexible and creative planning to achieve better neighborhood growth and development.



LAND USE PRINCIPLE:

- ③ Develop Tooele County into a self-sufficient region that includes adequate employment and service opportunities.



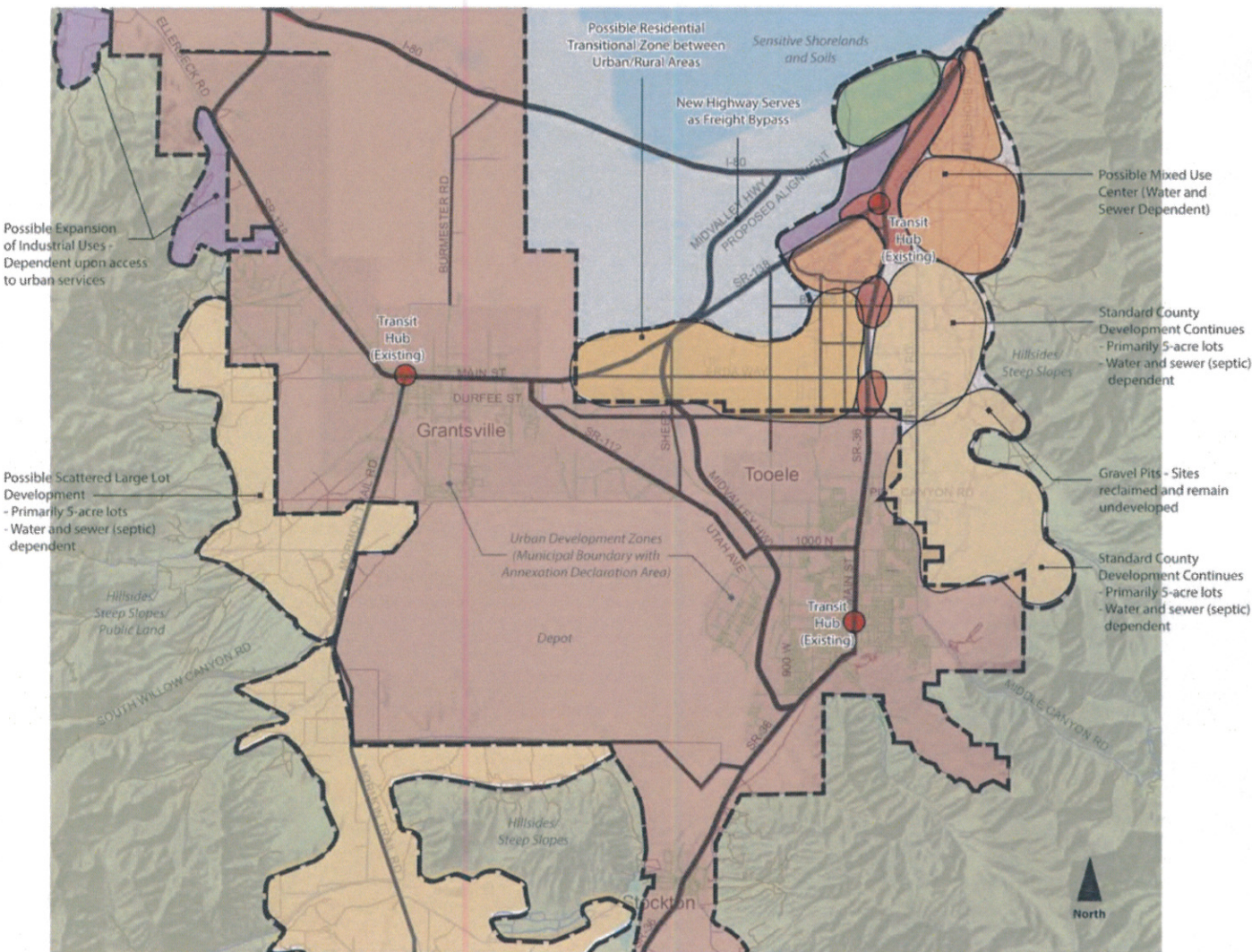
LAND USE PRINCIPLE:

- ④ Preserve public open lands, historic sites, cultural landscapes, and scenic resources as part of a comprehensive planning approach.

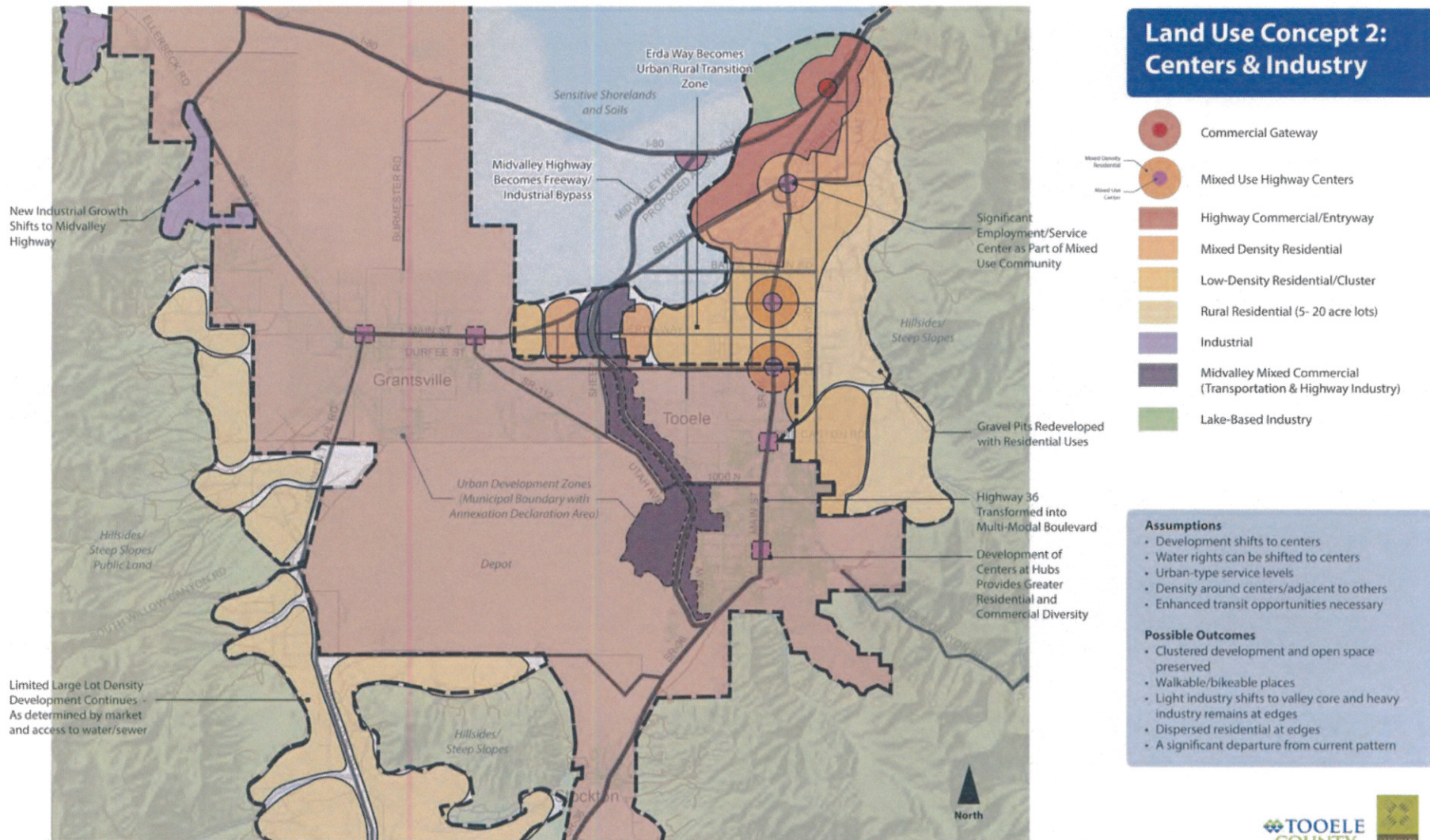


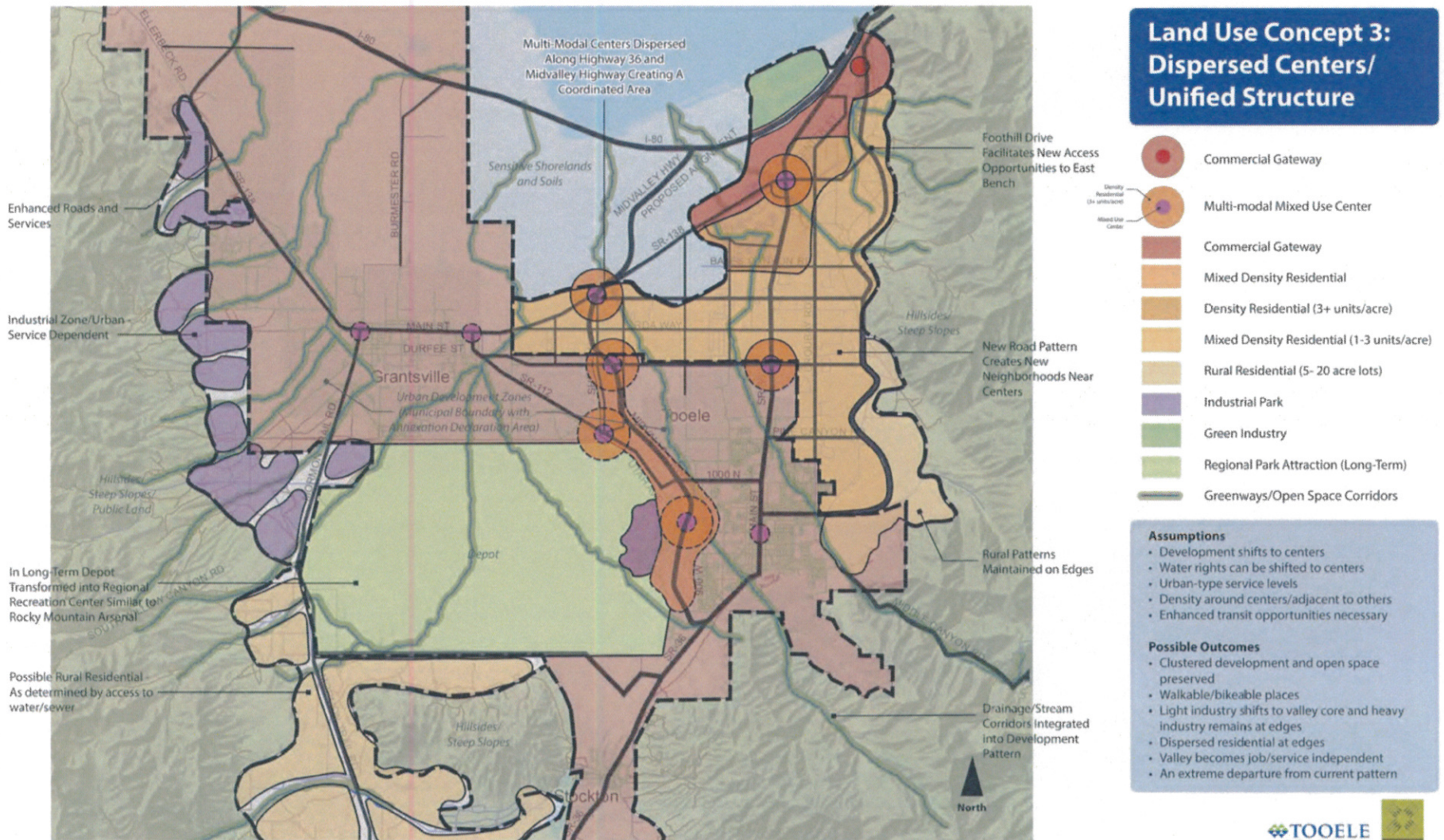
Appendix D:

Three Land Use Options



Land Use Concept 2: Centers & Industry





Appendix E:

Clustered Development Model Ordinances

A checklist for clustered development prepared by LandChoices www.landchoices.org is provided in the ensuing pages, followed by three model ordinances:

- Kennebec Valley Council of Governments, Model Open Space Subdivision Ordinance, Kennebec, Maine, July 2009
- Georgia Office of Planning and Quality Growth, Special Growth Management Techniques, Georgia Department of Community Affairs, 2002/2007
- American Planning Association, Model Smart Growth Land Development Regulations , Model Residential Cluster Development Ordinance, MODEL, Interim PAS Report, 2006

These resources are not meant for the direct development of an improved clustered development ordinance, but as review and inspiration as that process unfolds. Additional model ordinances from the local region may also readily available through the Utah Chapter of American Planning Association, Wasatch front Regional Council, EnvisionUtah, The Utah League of Cities and Towns, and similar organizations/agencies in Utah.

LandChoices

Checklist for Preserving Clean Water, Natural Areas, Wildlife and Working Farmland (www.landchoices.org)

1. Inexpensive Preliminary Sketch Plan

Include a sketch plan of greenway land, potential house sites, street alignments, and tentative lot lines, prepared according to the four-step design process for creating conservation subdivisions showing areas of proposed development and areas of proposed conservation.

This is to be prepared by a landscape architect or physical planner as the first layout document BEFORE expensive and highly detailed design drawings are created for the Preliminary Plan stage. This way any deficiencies can be corrected PRIOR to submission of the detailed, expensive Preliminary Plan.

The sketch plan is a carefully drawn rendition, done to a specific scale, and usually created as an Overlay Map to be lain on top of the underlying Existing Features/Site Analysis Map. They are always best done when done by hand, not on a computer screen.

They can be done in the field, or right afterwards, at a "mini-charrette" involving all parties concerned.

2. Conduct a Site Walk On the Property

Include all involved in the process-the developer, planning commission members, abutting landowners, officials, staff, etc. - BEFORE any engineering plans are put into place in order to point out the conservation areas to be preserved.

Important Note: Site walks should be advertised in the usual manner as informal Work Sessions, open to the public, at which no votes or binding decisions are taken. Site walks do not add more time, as they help the process move far more quickly, since people are no longer talking and arguing about abstract lines on paper, but real slopes, actual trees, etc., which means they really understand the site conditions. There is no substitute whatsoever for seeing the land first-hand.

3. Qualified Landscape Architect and Physical Planner Experienced in Designing Conservation Subdivisions be Involved from the Beginning of the Project

This is absolutely necessary.

In the book *Envisioning Better Communities* by Randall Arendt (American Planning Association, 2010, page 21), Arendt writes, "subdivision regulations typically suffer from five fundamental flaws, resulting in flawed designs." Flaw #4: "Layouts are typically prepared by surveyors and engineers who are trained in recording site data and in street and drainage issues. They have little or no expertise in the fields of landscape architecture or neighborhood design and therefore often fail to capitalize on the significant physical, historic, and environmental features of each property."

4. Existing Features Site Analysis Map

The official time clock for review starts with the submission of this plan at the on-site walkabout or at a regularly scheduled meeting of the Planning Commission.

More Information on Methods in the First Four Steps (steps 1-4)

["Flawed Processes, Flawed Results, and a Potential Solution"](#) (PDF) (5 pages)(PDF) (5 pages)

5. Safer, Less-Wide Streets

Allow safer, less-wide streets, eliminate curb and gutters (use swales instead to absorb excess water, along with rain gardens) to lower costs, recharge groundwater, and reduce storm water run off and pollution. Learn More at [Greener Streets: Enhancing Livability and Neighborhood Values through Greener Engineering Practices](#) (PDF)

6. Preserve a Minimum of 50%¹ of the BUILDABLE Land

This is in addition to the unbuildable wetlands, steep slopes and floodplains in new subdivisions.

7. Conservation Subdivision Design*

Implement Conservation Subdivisions into your ordinance
Download the following for further reference:

¹ In urban, sewerred, high density areas zoned at 2-3-4 units per acre, preserving 30-35% open space, in addition to the unbuildable wetlands, floodplains, and steep slopes, is the norm. In rural, suburban edge areas at densities of 5 and 10 acres per dwelling, where most of America's new subdivisions are being and will be built, easily 70% (or more) of the land can be preserved.

[LandChoices' approved conservation subdivision ordinance*](#)(doc) (61 pages) (417k) Courtesy of Walworth County, WI

[Ordinance Amendments](#) (Doc.) (2 pages)

[Conservation Subdivision Design: A Brief Overview](#) (PDF)

[Case Study: Indian Walk](#) (PDF) (2 pages)

[Case Study: West Vincent Township](#) (PDF) (2 pages)

*LandChoices does not warrant that this provision complies with your state's laws. As such you are advised to consult with an attorney that is familiar with your state's laws.

8. Conservation Subdivisions Designated as a "By-right Permitted Use" option

Designate conventional subdivision layouts as "Conditional Uses" or "Special Exemptions".

9. Create Interconnected Open Space Networks

Link together the conserved land in conservation subdivisions.

1. Model Open Space Subdivision Ordinance Kennebec Valley Council of Governments Kennebec, Maine July 2009

Introduction

Low-density development is altering the rural landscape of Maine. The State converted over 869,000 acres of rural land to suburban uses from 1980 to 2000 second only to Virginia in proportional change according to the 2006 Brookings Institute report "Charting Maine's Future: An Action Plan for Promoting Sustainable Prosperity and Quality of Places". This represents a loss of 1300 square miles of rural land, a territory roughly the size of Rhode Island. As the report lists the costs of sprawl it asserts that the greatest concern is that this low-density development is undermining Maine's brand, its rural character and special quality of life that remains the heart of the State's current and future economy. Put another way becoming more like "Anywhere USA" is bad for Maine's economy and environment.

Most Maine communities with Comprehensive Plans (and many towns without such plans) evidence a strong concern about loss of open space, farmland, and rural character. Local attitude surveys that often accompany these plans invariably show high levels of support for protecting open space, farmland, and rural character. Protecting rural character is a primary goal in practically every local Comprehensive Plan. Not surprisingly many municipalities have adopted cluster development ordinances with purposes that reflect this and other related goals. Typical purposes of these ordinances include: "to provide for the efficient use of land and the preservation of open space, farmland and rural character; to provide for

development in harmony with natural features of the land; to encourage the efficient use of infrastructure; to protect environmentally sensitive areas; to encourage affordable housing; ...
"

Open space subdivisions can provide economic, environmental and social benefits to a community as well as advantages for developers. Site development costs are decreased by designing with the terrain. Infrastructure and the service costs to maintain it are reduced because roads and water and sewer lines are almost always shorter. School buses, snow plows, rubbish trucks and other service vehicles will have shorter routes. Reduced costs to develop lots can incentivize including some affordable housing as part of the project. The protected open space provides residents with recreational opportunities and scenic views. Added amenities from adjacent protected open space increase home resale value and enhance marketing. Homes in open space subdivisions appreciate faster than those in conventional subdivisions. Such developments can protect unique, fragile and significant wildlife and plant habitats. Open space subdivisions reduce the pollution impacts from storm water runoff and promote aquifer recharge. Clustered housing with neighborhood trails encourages more frequent interactions with one's neighbors, fostering a sense of community. A larger open space network (green infrastructure) can be created if open space is connected across several developments and potentially support recreational trail networks and wildlife habitat links. Although open space subdivisions offer many benefits these developments are a partial essential prescription to protecting community rural character, etc.. Creation and implementation of a local open space plan that has identified high value natural areas including farmland for protection is also essential.

Open space subdivisions intentionally (or should intentionally) include important features in protected open space. Traditional cluster subdivisions typically do not. Unfortunately most cluster subdivision ordinances fail to accomplish their purposes. Many of these ordinances lack site design criteria for locating lots and open space. Some of these design criteria direct new construction to locations on the site where buildings can be absorbed by natural landscape features. Many cluster subdivision ordinances set aside too little open space in rural districts. Several studies show that rural character breaks down when open space percentage falls below 60 – 70 percent. Cluster subdivisions are often optional and not mandated. Developers typically do not choose a development option that they're unfamiliar with. When open space subdivisions are optional most if not all subdivisions in that municipality will continue to be conventional. A preliminary review that maps site constraints and opportunities and designs the subdivision around these features is also often absent.

This model open space subdivision ordinance strives to address these and other typical deficiencies so that the typical purposes (listed earlier in this introduction) expressed at the beginning of most cluster subdivision ordinances can be achieved. This model mandates open space subdivisions in rural districts while assuring that the same number of lots allowed for a conventional subdivision is allowed for an open space subdivision. A pre-application review is required that includes a site inventory map and a conceptual (sketch) plan for the proposed development. Site design standards for lot and open space location are part of the ordinance. Open space ownership, use and maintenance standards are also included.

This model ordinance is designed to fit into an existing local land use ordinance, which has a review structure. It is not a stand-alone

ordinance. Application of this ordinance should be reviewed by a municipal attorney prior to adoption.

This model ordinance is a product of reviewing numerous ordinances and reports related to open space subdivisions. Feedback from Planning Board members at open space subdivision workshops was appreciated and useful. Appreciation also extends to Chris Huck and Jen Boothroyd respectively Planning Director and Community Planner at KVCOG for review comments. This model ordinance was prepared by Fred Snow Community Planner at KVCOG.

Model Open Space Subdivision Ordinance Kennebec Valley Council of Governments

Model Regulations

1.0 Purpose

The purposes of these provisions are:

1. To provide for efficient use of the land and the preservation of open space, farmland, and rural character;
2. To provide for development in harmony with the natural features of the land that is consistent with historic land use patterns of village-like areas where residences are grouped, surrounded by areas of open space used for agriculture, forestry, recreation and similar purposes;
3. To protect high value natural areas;
4. To reduce the impacts on water resources by minimizing land disturbance and creation of impervious surfaces and stormwater runoff;
5. To encourage efficient use of infrastructure.

2.0 Applicability

1. The provisions of this ordinance apply to all major subdivisions.
2. The provisions of this ordinance shall be mandatory for all major subdivisions in rural district(s) or rural area(s) except as otherwise noted. Open space subdivisions (OSS) have not worked as an option to conventional subdivisions even with density bonuses. Mandating OSS is best. Some towns require either OSS or 10 acre lots but that approach can promote large lot sprawl.
3. The provisions of this ordinance shall be [mandatory] for all major subdivisions in village district(s) or village area(s)
Note: A word(s) in brackets [] indicates that this is recommended and/or that there are options or specifics to fill in.

3.0 Definitions

Buildable Area. Land area of a parcel excluding Unbuildable Area.

Building Envelope. The area formed by front, side, and rear building restrictions or setback lines of a lot within which development including clearing, excavation, and grading and structures shall be contained. This means a building envelope within each house lot not a building envelope of overall buildable area.

Open Space, Designated. Reserved land that is permanently protected from further development and remains in a natural condition or is managed according to an approved management plan for natural resource functions, e.g. habitat

protection, passive recreation, agriculture, forestry or some combination of these.

Open Space Percentage. The percentage of Buildable Area that's required to be part of designated open space.

Primary Conservation Area. Those Unbuildable Areas that include steep slopes (20% or more), hydric soils, wetlands, and surface waters including intermittent streams.

Secondary Conservation Areas. Those areas with significant features that include open fields, high value natural areas, prime USDA agricultural soils, mature woodlands, stone walls, tree lines, existing historic structures, scenic views into and out of the property, trails and hilltops.

Subdivision, Future. A proposed or potential subdivision subsequent to an initial subdivision on the same parent parcel. Note: the number of future lots, a delineated area that will contain all future lots, and a delineated area for future designated open space must be established according to requirements of this Ordinance prior to and shall not be altered subsequent to an initial approved Minor or Major Subdivision.

Subdivision, Minor. A subdivision with up to 4 lots. Note: minor subdivisions are not required to be Open Space Subdivisions.

Subdivision, Major. A subdivision with five or more lots. Note: major subdivisions shall be Open Space Subdivisions.

Subdivision, Open Space. An alternative form of residential development where, instead of subdividing an entire tract into lots of conventional size, the same or a similar, number of housing units are arranged on lots of reduced dimensions, with the remaining area of the parcel permanently protected as Designated Open Space. Open space subdivisions (OSS) differ from traditional “clustering” in three important ways. First OSS is intentional about quality of open space meaning significant features are included and protected. Second, in rural areas OSS lots are absorbed into the landscape when possible according to site design criteria rather than just put somewhere on the site that’s buildable. Third, OSS strives to help create an interconnected open space network in the community.

Unbuildable Area. Land area that cannot be counted toward the minimum lot size under a conventional subdivision and includes steep slopes (20% or more), hydric soils, wetlands, surface water, rights of ways and easements, Resource Protection District, flood ways and coastal high hazard zones and portions used for storm water management facilities.

4.0 Pre-application Review

All applicants for review of major subdivisions are required to participate in a pre-application review process with the Municipal Reviewing Authority. The purpose of this process is to discuss the characteristics of the site and proposed plan for development in conceptual terms. The preliminary review shall be conducted following notification to abutters and the general public. Public input will be accepted. This supplements the municipality’s formal application procedure which should be reviewed to provide consistency. This

approach provides essential site design information early in the review process which often saves developers money by not requiring high engineering costs upfront and by reducing the likelihood of costly major plan revisions later on. In other words pre-application review can expedite the formal application process and review.

1. Pre-application Discussion. A pre-application discussion is strongly encouraged between the applicant, site designer(s), and the Municipal reviewing Authority. The purpose of this informal meeting is to introduce the applicant and site designer(s) to the municipality’s zoning and subdivision regulations and discuss the applicant’s objectives in relation to those requirements. The applicant may choose to bring a Site Context Map and an Existing Features Plan to this meeting.
2. Site Context Map. The site context map shall be drawn to a size adequate to show the relationship of the proposed subdivision to adjacent properties and to locate the subdivision within the municipality, e.g., 1 inch = 400 feet. The site context map shall include the following:
 1. An outline of subject parcel along with abutting properties perhaps from a tax map and current uses on those properties.
 2. Existing subdivisions in proximity of the subject parcel.
 3. An outline of the subject parcel on a USGS topographic map.
 4. Zoning district.
 5. Tax map and lot number of subject parcel.
 6. Watershed description.
 7. Location and names of existing streets.

8. Location of circle showing features within half mile of subject parcel on Beginning with Habitat High Value Habitats map. The State municipal map if available can be downloaded from www.beginningwithhabitat.org/the_maps/map_availability.html
3. Existing Features (Site Inventory) Map. The site inventory map(s) shall be at a scale of one inch equals 100 feet (unless another scale is mutually agreed upon) and shall involve an individual or team with the necessary training in natural resources, preferably a landscape architect, and who shall certify the information submitted. The inventory and map(s) shall include, at a minimum, the following:
 1. The proposed name of the subdivision, north arrow, date and scale.
 2. The boundaries of the parcel based upon a standard boundary survey prepared by a registered land surveyor and giving the bearings and distances of all property lines.
 3. A contour map based at least upon topographic maps published by the U.S. Geological Survey.
 4. The location and delineation of Primary Conservation Areas. (Note a high intensity soils map based on test pits may be advantageous in determining less area with hydric soils.) The total acreage of Primary Conservation areas shall be included.
 5. The location and delineation of existing buildings and unbuildable areas that are not Primary Conservation Areas including rights-of-ways and easements, portions in Resource Protection district, and portions utilized for storm water management facilities.
6. The location and delineation of any Essential Habitat Areas onsite or within 250 feet of the subdivision and any other important habitat areas onsite indicated on State Beginning with Habitat maps
 7. Identification of scenic views into and out from the property with accompanying photos and location and delineation of other Secondary Conservation Areas. The total acreage of Secondary Conservation Areas when applicable shall be included.
 8. The identification and location of vegetative cover on the property
4. Calculations. Applicants shall provide:
 1. Minimum Lot Size. Applicable minimum lot size in the zone project is located in.
 2. Unbuildable Land. Total acreage of Unbuildable Land. Include and total applicable elements from list in section 10.3.
 3. Number of Allowable Lots. Number of allowable lots according to formula in section 6.3 The number of allowable lots is based on the number of allowable lots permitted under conventional zoning or subdivision ordinance. Municipality should have an unbuildable area provision but if it's lacking then assume unbuildable area of 15%.
 4. Open Space Set Aside. Provide total acreage of designated open space that shall be set aside using formula in section 6.4.
 5. On-Site Visit. After the Existing Features Plan has been prepared, the Planning Board shall schedule an

on-site visit to walk the property with the applicant and the site designer. The applicant shall bring a copy of the Existing Features Plan to the on-site visit. The purpose of this visit is to familiarize Town officials with the property's special features, and to provide them an informal opportunity to offer guidance (or at least a response) to the applicant regarding the location of the Secondary Conservation Areas and potential house locations and street alignments. How the "four step process" to designing subdivisions in section 4.6 could be applied to the subject property should also be discussed.

6. Conceptual Plan of Proposed Development. Applicants shall submit a conceptual plan for the development of the subject parcel that reflects the characteristics of the site as detailed in the site inventory and map(s) and its location within the community as indicated in the site context map. The conceptual plan shall be prepared at the same scale as the site inventory map and be provided as both a translucent sheet, which can be overlaid onto the site inventory map(s), and solid plan. A conceptual plan shall be a draft plan, which does not include engineering details, but is drawn to scale and indicates the following:
 1. Proposed location of any new road(s) or common driveway(s).
 2. Proposed residential lots, building envelopes, and potential house sites for each lot.

3. Existing and proposed features and amenities, including common areas, trails, or community buildings, etc.
4. Proposed boundaries of the designated open space.
5. A narrative description of the proposed approach for providing for drinking water supply, waste water treatment, stormwater management, and landscaping.

Applicants shall demonstrate that their conceptual plan is consistent with the following approach for designing a subdivision:

- a. Step One: Identify Conservation Areas. All Primary and Secondary Conservation Areas and unbuildable areas shall be identified and when applicable shall be delineated.
- b. Step Two: Locate House Sites. To the maximum extent feasible, house sites shall be located outside of those areas delineated in Step One. The location of the house sites shall also reflect the design objectives identified in section 8.0.
- c. Step Three: Align Streets, Common Driveways and Trails. The minimum length and network of road(s) necessary to access each house lot shall be identified. Common driveways shall also be identified. Roads and common driveways shall be located in such a way that avoids or at least minimizes adverse impacts on both Primary and Secondary Conservation Areas e.g. when possible these access ways shall not be located in open fields unless along part of field perimeter or along a tree line. Proposed trails shall be identified where access to the designated open space is appropriate and/or to provide for pedestrian

- circulation within the development as well as pedestrian access to areas outside the development.
- d. Step Four: Identify Lot Lines and Building Envelopes. Lot lines and building envelopes for each house site, or group of homes on a common lot, shall be identified. The placement of lot lines and building envelopes shall give consideration to those areas identified in Step One as well as conform to the natural features of the landscape to the greatest extent possible, e.g., follow stone walls, lines of boundary trees, streams. The delineation of lots shall also consider the privacy provided for individual homeowners.
7. Conceptual Long Range Development Plan. When a subdivision will not utilize the entire parcel and there is potential for future subdivision or development of the parcel or any of the lots being created, the application shall include a conceptual long-range development plan showing the potential utilization of the lots and the balance of the parcel not being subdivided. The conceptual long range development plan is a sketch plan with no engineering details, intended to be conceptual in nature, to rely on published data about natural resources relevant to the parcel, and to demonstrate that the current subdivision proposal will not compromise important conservation values or the long term development of the parcel as a conservation design subdivision. This plan shall show the relationship of the proposed subdivision area to the balance of the parcel and to adjacent land. This plan shall analyze the conservation and development potential of the

remaining area of the parcel and shall identify and delineate future designated open space area(s), and development area(s) in a manner that demonstrates that both the proposed development and the future development can occur so that it conforms to the requirements for conservation design subdivisions and preserves the significant natural resource and conservation values of the entire parcel. The number of future lots allowed and number of future lots proposed must be shown on the plan. After an initial subdivision has been approved the number of lots for the entire parcel and the boundaries of future area(s) to be developed and future area(s) to be protected as designated open space cannot be changed. The size of future lots can be altered.

5.0 Formal Application Procedure

[A community should evaluate its existing formal application procedure for consistency. Much of the information from the preliminary application process could be applied to the formal application process, which typically concerns a preliminary subdivision plan and a final plan. Because of opportunity for public input during preliminary review the Planning Board may opt not to hold a public hearing to expedite review.]

6.0 Maximum Density and Open Space

1. Growth (and/or Village) Open Space Percentage. Growth (and/or Village) district(s) shall have an Open Space

Percentage of [30] percent for open space subdivisions.

Percent of open space often varies by zone. 30% is suggested minimum for growth district but it could be as low as 20% or more than 30%.

2. Rural Open Space Percentage. Rural district(s) shall have an Open Space Percentage of 60 percent for open space subdivisions. One planning researcher found that rural character breaks down as open space percentage (OSP) in rural area fall below 70%. He found that metro farms require a minimum of 75% OSP and general agriculture (dairy farms, etc.) require a minimum of 85%. Two other researchers found rural areas typically have 60% to 80% OSPs.

3. Number of Allowable Lots. The total number of residential units allowable within an open space subdivision shall equal but not exceed the number of units that would otherwise be allowed in a conventional subdivision in an existing zoning district unless a density bonus is granted per Section 7.0. The total number of dwelling units allowed shall be determined by the following formula: See comment for 4.4.c.

Total Dwelling Units Allowed = Total Parcel minus
Unbuildable Area divided by Minimum Lot Size

$$TU = (TP - UA) / MLS$$

TU = Total Units Allowed (dwelling units)
TP = Total Parcel (acres)
UA = Unbuildable Area (acres)
MLS = Minimum Lot Size (acres)

Note: If minimum lot size is in square feet round to nearest fraction of an acre e.g. a 20,000 square foot minimum lot size would be rounded up to half an acre.

4. Open Space Set Aside. The amount of Designated Open Space that shall be set aside shall be determined by the following formula:

Total Open Space Set Aside = Total Parcel minus Primary
Conservation Areas multiplied by Open Space
Percentage then added to Primary Conservation
Areas

$$TO = ((TP - PC) OSP) + PC$$

TO = Total Open Space Set Aside (acres)

TP = Total Parcel (acres)

PC = Primary Conservation Areas (acres)

OSP = Open Space Percentage (% of Buildable Area)

Note: See Appendix 1 for examples of how these formulas are applied.

7.0 Density Bonuses

The Planning Board may grant a density bonus to an applicant who proposes affordable housing and/or a Low Impact Development approach as a component of the open space subdivision, in accordance with the following criteria:

Providing full public access or more protected open space are also actions a municipality might wish to incentivize. Incentives, which typically take the form

of additional dwelling units should however be used sparingly. Too many opportunities for applicants to increase the number of dwelling units allowed can reduce community support for using an open space approach.

1. Affordable Housing Bonus.

1. A 10% increase in the number of dwelling units allowed may be granted by the Planning Board if an applicant provides a minimum of 25% of units affordable for families meeting criteria of 80% to 120% of the County's median income. Such units may be either for sale or rent.

2. The Planning Board must approve a plan for long-term retention of the affordable units within that category.

2. Low Impact Development (LID) Bonus. A 10% increase in the number of dwelling units allowed may be granted by the Planning Board if LID practices according to Maine State Planning Office's "LID Guidance Manual for Maine Communities" are incorporated into the subdivision.

8.0 Design Standards

1. The following objectives for location of lots and designated open space shall be achieved to the greatest extent feasible in prioritized order: Site design criteria are essential in

determining quality of open space by intentionally making significant features part of protected open space.

1. Within Rural District(s):

1. Primary Conservation Areas in protected open space
2. Lots on or with access to suitable soils for subsurface wastewater disposal if no public sewer system
3. Lots within woodlands or if that's not possible along far edges of open fields preferably adjacent to woodlands (to enable new construction to be absorbed by natural landscape features) This criterion is essential in protecting the rural character of the site.
4. Lots where scenic views from public roadways are least likely to be blocked or interrupted
5. Essential habitats of rare, threatened or endangered wildlife and rare or exemplary plants and natural communities identified on State Beginning with Habitat maps in protected open space
6. Stream corridors and wildlife travel corridors with respective undisturbed vegetative buffers of 100 feet and 300 feet width in protected open space
7. Preservation of cultural features of the rural landscape, including significant trees, stonewalls, tree lines, and when feasible historic farmhouses and outbuildings. Significant trees, tree lines, and stonewalls and other important natural features not included within designated open space should be incorporated along the edges of individual lots or along a path or road, rather than transected by lot lines or a roadway.
8. High Value Plant and Animal Habitat areas identified on State Beginning with Habitat map and high value

9. natural areas identified in an adopted local or regional open space plan in protected open space
 10. Contiguous, usable area for agriculture or sustainable wood lot production in protected open space
 11. Lots where linkage with nearby open space on other properties is not blocked, and when possible, where continuous corridors of natural vegetation are protected in alignment with any adopted local or regional open space plan
 12. Lots avoid slopes exceeding 20% and tops of ridgelines
 13. Lots avoid natural drainage ways
 14. Class 1, 2, 3 agricultural soils as defined by USDA in protected open space
 15. Lots where greatest number of units could take maximum advantage of solar heating opportunities provided there is no or minimal conflict with other objectives
2. Within Village District(s):
1. Primary conservation areas in protected open space
 2. Preservation of cultural features of the village landscape, including stone walls, tree lines, and when feasible historic homes and outbuildings A village-type layout of homes, consistent with the traditional New England style of development, will allow homes to be located closer together in much less space, while still creating a comfortable environment for residents and pedestrians.
 3. Lots where linkage with nearby open space on other properties is not blocked, and when possible, where continuous corridors of natural vegetation are protected in alignment with any adopted local or regional open space plan
 4. Lots where buildings will not interfere with solar access of other properties
 5. Lots where greatest number of units could be designed to take maximum advantage of solar heating opportunities
 6. Lots within woodlands contained in the parcel or if that's not possible along far edges of open fields preferably adjacent to woodlands (to enable new construction to be absorbed by natural landscape features)
 7. Lots where scenic views from public roads are least likely to be blocked or interrupted
2. Architectural compatibility of new construction with historic buildings in the community or region is [strongly recommended].
- 9.0 Open Space Ownership, Use, and Maintenance
- The Designated Open Space created by the subdivision shall be:
1. Shown on the plat plan with the following notation: "Designated Open Space shall not be further subdivided or used for future building lots."
 2. Shown on the plat plan including boundaries of Designated Open Space areas, active recreation area if any, agricultural area, and naturally, undisturbed vegetated areas and marked in the field with signage

approved by the Planning Board to distinguish these areas from private property.

3. Accessible to the owners or residents of the development, subject to any necessary limitations in connection with the uses of the land (e.g., farming), which may be permitted.
4. Uses. Limited to uses for passive recreation, or other passive outdoor activities, agriculture, forest management or individual or group septic systems, and for preserving the natural features of the site except as noted in section 10.18. Potential uses (e.g., farming) may be by the subdivider, owners or residents, or a lessee. The use of any open space may be further limited or controlled at the time of final subdivision approval as necessary to protect adjacent properties. Passive recreation would include walking, hiking, cross country skiing, horseback riding, bird watching, picnicking. Passive recreation is typically allowed in most of designated open space. However trails (usually foot paths) should be designed between lot owners.
5. Management Plan. Managed according to a management plan for the designated open space and facilities that's approved by the Planning Board, which includes the following:
 1. Identifies the entity assuming responsibility for stewardship and management of the designated open space, including regular inspections to confirm continued compliance

with the terms of the subdivision approval and conservation easement or deed restrictions. One approach to provide for long-term stewardship is to assess a fee at the time of subdivision approval to fund long-term monitoring. Most local and state organizations require a fee to cover their stewardship responsibilities when accepting an easement.

- Municipalities might also require that homeowner education materials be developed to teach new homeowners about the appropriate uses and prohibited activities in the protected open space. The Municipal Reviewing Authority might discuss with the conservation commission how these materials will be developed, maintained and distributed to future homeowners.
2. Includes detailed standards and schedules for maintenance of the designated open space, including maintenance of vegetation.
 3. Allows for municipal maintenance in the event that the maintenance specified under the agreement is not completed and recovery of costs incurred from the designated management entity or the owners of the designated open space within the subdivision.
 4. Provides that any amendments to the plan shall be reviewed and approved by the Municipal Reviewing Authority.
 5. Prior to the commencement of any timber harvesting a forest management plan defined by Title 36 MRSA Section 573.3-A shall be

submitted to the Municipal Reviewing Authority. The plan must be prepared by a licensed professional forester or a landowner and be reviewed and certified by a professional forester.

6. Ownership. Owned, preserved, and maintained as required by this section by any of the following mechanisms or combinations thereof:

1. Dedication of open space to the Town or a suitable land trust, if either is willing to accept the dedication.
2. Dedication of development rights of open space to a suitable land trust with ownership by a private individual or homeowners association.

Conservation easements are the preferred approach for larger areas of protected open space, especially for parcels containing high-valued natural resource or cultural features.

3. Ownership of the open space by a homeowners' association which assumes full responsibility for its maintenance with open space protection deed restrictions enforceable by any landowner in the subdivision, any owner of separate land parcels abutting the open space, or the municipality

4. Ownership by a private individual with open space protection deed restrictions enforceable by any land owner within the subdivision, any owner of separate land parcels abutting the open space, or the municipality. This option may apply only if open space is part of an existing farm, working or not, if there is a future intent to farm by the owner and no land trust is willing to accept dedication of development rights of the open space. A deed restriction is a restriction on the use of land usually set forth in the deed of a property. The restrictions would limit how the open is used, the structures that would be allowed on it and how the land should be maintained in perpetuity. Municipalities should provide sample language to the applicant to ensure effectiveness. Although deed restrictions are considered a less secure alternative, they can be an appropriate protection method for smaller parcels of land or for open spaces that are subject to more intensive uses.

7. Homeowner's Association. Controlled by a homeowners association in the event ownership options per sections 6.1, 2 and 4

are not exercised. If a homeowners' association (association) is to be formed it shall be incorporated by the developer prior to final subdivision approval. Covenants for mandatory membership in the association shall be approved by the Planning Board and included in the deed for each lot or unit. Draft by-laws of the proposed lot owners' association specifying the responsibilities and authority of the association, the operating procedures of the association and providing for proper capitalization of the association to cover the costs of major repairs, maintenance and replacement of common facilities shall also be subject to Planning Board approval. The association's documents shall specify that:

1. The association shall have the responsibility of maintaining the designated open space and other private facilities dedicated to the use in common by the development's resident.
2. The association shall levy annual charges against all property owners to defray the expenses, if any, connected with maintenance of the common open spaces and facilities.
3. The association shall have the power to place a lien on the property of members who fail to pay dues or assessments.

4. The developer shall maintain control of designated open spaces and facilities and be responsible for their maintenance until at least 51% of the development lots or units have been conveyed, with evidence of such completion and sales submitted to and approved by the Planning Board.

10.0 Other Standards

1. Professional Services. The Municipal Reviewing Authority may retain professional services, third-party technical review of information provided concerning the existing features map and conceptual plan of proposed development submitted for pre-application review and for formal application review including but not limited to an attorney or consultant. The attorney or consultant shall first estimate the reasonable cost of such review and the applicant shall deposit, with the municipality, the full estimated cost, which the municipality shall place in an escrow account. The municipality shall pay the attorney or consultant from the escrow account and reimburse the applicant if funds remain after payment.
2. Legal Review. Prior to final approval by the Municipal Reviewing Authority the applicant shall submit for review by the municipal attorney any restrictive covenants, conservation easement, deed restrictions or other legal agreements proposed for use in the open space subdivision. The municipal attorney shall advise the Municipal Reviewing Authority of the adequacy of such legal provisions. The applicant shall pay all associated costs of the legal review.

3. Unbuildable Area. Unbuildable area includes those portions of the lot:
 1. With hydric soils.
 2. Subject to rights-of-way or easements.
 3. Located in Resource Protection District.
 4. Covered by surface waters.
 5. Utilized for storm water management facilities.
 6. With slopes exceeding 20%.
 7. Ten (10) percent of the area of the lot to account for roads and parking.
 8. In a floodway or a coastal high hazard zone as designated in the Flood Boundary and Floodway Map prepared by the Federal Insurance Administration
4. Flexible Lot Dimensions. Reductions below the minimum otherwise required by this Ordinance for lot area, street frontage, and lot width are allowed for open space subdivision lots except that minimum lot size for subsurface disposal remains 20,000 square feet. Irregular lot shapes are allowed. In areas with public sewer and water particularly growth areas minimum lot size could be 10,000 square feet (SF) but shouldn't be less than 5000 SF.
5. Minimum Setback. The minimum setback of lot lines from edge of road pavement shall be 20 feet.
6. Parcel Boundary Setback and Buffer. Lots shall not be less than 50 feet from parcel boundary. A minimum 50 foot undisturbed buffer shall be established between lots and the parcel perimeter.
7. Privacy. To the extent practical, building sites shall be delineated to maximize the privacy afforded to each dwelling unit, by, for example, positioning homes to eliminate direct sight lines to neighboring homes. Single-loaded streets (houses on just one side of the street) are encouraged.
8. Green Lot Perimeter Strip. A green perimeter strip, not less than 25 feet wide shall be maintained with shrubs and trees along all lot lines except outside of wooded areas in designated growth districts or areas the front yard buffer strip may be vegetated with grass or flowers. Such a green strip shall not be built on or paved or used for parking or storage. There shall be no removal of trees over 4 inches in diameter within this buffer. Vegetation shall be retained in its natural state, although tree planting shall be permitted as a matter of right. A primary function of green perimeter strip of each lot especially along backyard sidelines and rear lines is to maintain privacy. Native vegetation should be required because it's more durable and helps avoid a suburban appearance.
9. Roadside Buffer. Outside of designated growth areas, a subdivision in which the land cover type at the time of application is forested, shall maintain an undisturbed wooded buffer strip no less than fifty feet in width along all existing public roads. The buffer may be broken only for driveways and streets.
10. Ridgelines. When a proposed subdivision contains a ridge line identified in the comprehensive plan as a visual resource to be protected, the plan shall restrict tree removal and prohibit building placement within 50 feet vertical distance of the ridge top. These restrictions shall appear as notes on the plan and as covenants in the deed.

11. Historic Resources. If any portion of the subdivision is designated a site of historic or prehistoric importance by the comprehensive plan, National Register of Historic Places, or the Maine Historic Preservation Commission, appropriate measures for the protection of the historic or prehistoric resources shall be included in the plan. When the historic features to be protected include buildings, the placement and the architectural design of new structures in the subdivision shall be similar to the historic structures. The Board shall seek the advice of the Maine Historic Preservation Commission in reviewing such plans.
12. Essential Habitat Buffer. At least a minimum 300 foot undisturbed natural buffer shall be established between development and any Essential Habitat Areas as mapped by Maine Department of Inland Fisheries and Wildlife (MDIFW) Beginning with Habitat program. The applicant shall provide review comments from MDIFW or Maine Natural Areas Program as applicable when essential habitat Areas have been identified.
13. Access Limit. Points of subdivision access to a single existing road shall not exceed two.
14. Roads.
 1. Roads serving open space subdivisions with up to 20 dwelling units shall have a minimum pavement width of 18 feet with a minimum shoulder width of 3 feet. Roads for all subdivisions shall have a maximum pavement width of twenty feet. Shoulders shall be topped with 2 -3 inches of loam and seeded with grass suited for the purpose.
 2. Where feasible, horizontal road alignments shall work with the topography and existing site conditions to follow the natural contours and avoid physical features that give the land its character.
 3. Open fields, agricultural lands and sensitive habitats should be crossed at the edges, preferably along hedgerows and tree lines when possible. Roadways shall avoid bisecting fields.
 4. Where feasible, proposed roads should follow any existing gravel/dirt road that has value as a local historic resource.
 5. When roads cross significant viewsheds in open fields, consideration shall be given to design approaches that will minimize their visual impact. These may include earth berms (designed with gently tapered side slopes), landscape screening using native shrubs, and 'ha-ha's' (an old English tradition which puts the roadway in a slight depression and out of view).
 6. Where existing roads must be widened to accommodate increased traffic volumes, care shall be taken to preserve mature roadside trees and other features which contribute to the road's character.
 7. Where drainage culverts are visible, the ends shall be cut off to follow the contour of the surrounding grade and/or covered with stone.
 8. Guardrails shall be constructed of wood or self-oxidized steel to avoid a harsh industrialized appearance.
15. Common Driveways. Common driveways are allowed and encouraged where appropriate to access individual lots. The following design and construction standards shall apply:

1. The maximum length shall not exceed 1000 feet.
 2. All common driveways in excess of 500 feet shall contain at least one 10 foot by 30 foot turnout. The exact location shall be determined by the Planning Board with the review of the Fire Department.
 3. The common driveway shall have a minimum 25 foot right of way (ROW) for up to 2 lots or dwelling units, and a minimum 50 foot ROW for over 2 lots or dwelling units.
 4. The travel way shall be 12 feet wide with 2 foot graded and grassed shoulders, and shall be located as close as possible to ROW centerline.
 5. The travel way shall be constructed of a minimum of 12 inches of gravel.
 6. Drainage ditches and culverts shall be provided as necessary.
16. Trails.
1. Trail improvements shall demonstrate adherence to principles of quality trail design.
 2. Trails shall have a vertical clearance of not less than 10 feet.
 3. The width of the trail surface may vary depending upon type of use to be accommodated , but in no case shall it be less than 3 feet or greater than 6 feet.
 4. No trail shall be designed with the intent to accommodate motorized vehicles.
 5. Trails except for points of access shall be no less than 50 feet from parcel boundary.
17. Mowing. Any portion of the designated open space not under cultivation which is comprised of open field or pasture shall be mowed at least once annually.
18. Open Space Contiguity. Reasonable efforts shall be made to locate designated open space adjacent to existing undeveloped land to form a continuous integrated open space system according to local or regional open space plan if any. At least 75% of designated open space shall be contiguous.
19. Shared Subsurface Disposal Systems. Shared subsurface disposal systems may be permitted in designated open space provided that requirements of the Maine State Plumbing Code are met, including appropriate provisions for legal obligations related to maintenance and replacement.
20. Underground Utilities. All utilities shall be installed underground unless specifically waived by the Planning Board. Transformer boxes, pumping stations and meters shall be located so as not to be unsightly or hazardous to the public.
21. Phosphorous Export. When a proposed subdivision is within the direct watershed of a Great Pond , the applicant shall make provisions to limit the export of phosphorus from the site following completion of the development, consistent with the maximum allowable phosphorus standard from Maine Department of Environmental Protection's "Phosphorus Control in Lake Watersheds: A Technical Guide to Evaluating New Development". This provision may already be in municipal zoning ordinance.
22. Active Recreation. Active recreation requires equipment and takes place at prescribed sites and includes tennis and other court games, swimming, baseball and other field sports and

playground activities. Active recreation shall be limited to one site, can encompass no more than one acre of the designated open space and must be screened from view in rural districts or areas except as noted further in this subsection. Any building associated with the active recreation site is limited to 400 square feet. When open space subdivisions are located in a growth area with zoning district density equal to or greater than 3 dwelling units per acre 25% of the designated open space up to a maximum of 3 acres can be used for active recreation including ball fields and total building footprint is limited to 1000 square feet.

23. Future Subdivision. When a subdivision will not utilize the entire parcel and there is a potential for future subdivision the total number of initial lots and future lots shall be provided and an area where future lots will be located and remaining area where protected open space will be designated shall be delineated according to the requirements for open space subdivisions. Once an initial subdivision has been approved the number of future lots and delineated areas of future development and future protected open space cannot be altered. Lot sizes can be changed within the future development area. A reason for this provision is that a certain percentage of the whole tract must be set aside as open space when a major subdivision is proposed. Primary conservation areas and secondary conservation areas from the whole tract must be incorporated in designated open space. If lots were sold in a minor subdivision prior to a revised proposal for a major subdivision on the same parcel it would invariably be impossible to include the primary and secondary conservation areas, which could be present in those sold lots. Thus a requirement in the ordinance could not be met. This provision is included so

that piecemeal submissions of minor subdivisions to avoid submission as a major (open space) subdivision can't happen thereby helping protect primary and secondary conservation areas.

Appendix 1:
Example of Applying Formulas That Determine Number of Allowable Lots and Amount of Open Space To Set Aside

Assume That a 100 acre parcel is being developed. Assume that the unbuildable area of the parcel is 10 acres. Assume that the minimum lot size in the zone is 2 acres. Assume that there are 8 acres of Primary Conservation areas. Assume that the open space percentage for the zone is 60% (or as a decimal .6).

The following formula would be used to determine the number of allowable lots:

Total Dwelling Units Allowed = Total Parcel minus Unbuildable Area divided by Minimum Lot Size

$$TU = (TP - UA) / MLS$$

TU	=	Total Units Allowed	
		(dwelling units)	
TP	=	Total Parcel	(acres)
UA	=	Unbuildable Area	(acres)
MLS	=	Minimum Lot Size	(acres)

Note: If minimum lot size is in square feet round to nearest fraction of an acre e.g. a 20,000 square foot minimum lot size would be rounded up to half an acre.

TU = Total Units or Lots Allowed
 TP = 100 acres Total Parcel
 UA = 10 acres Unbuildable Area
 MLS = 2 acres Minimum Lot Size

$TU = (100 - 10) / 2$
 $TU = 90 / 2$
 TU = 45 Total Lots or Dwelling Units Allowed

TO = 63 acres of Total Open Space Set Aside

So a maximum of 45 lots could be developed on 37 acres
 (100 – 63 = 37).

The following formula would be used to determine the amount of open space to set aside:

Total Open Space Set Aside = Total Parcel minus Primary Conservation Areas multiplied by Open Space Percentage then added to Primary Conservation Areas

$$TO = ((TP - PC) OSP) + PC$$

TO = Total Open Space Set Aside (acres)
 TP = Total Parcel (acres)
 PC = Primary Conservation Areas (acres)
 OSP = Open Space Percentage
 (% of Buildable Area)

TO = Total Open Space Set Aside
 TP = 100 acres Total Parcel
 PC = 8 acres Primary Conservation Areas
 OSP = 60% (or .6) Open Space Percentage

$TO = ((100 - 8) .6) + 8$
 $TO = (92) .6 + 8$
 $TO = (55) + 8$

**2. Georgia Office of Planning and Quality Growth
Planning and Environmental Management Division
GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS
First Published: April, 2002/ Updated June 2007
Prepared for the State of Georgia Local Governments**

PART EIGHT: SPECIAL GROWTH MANAGEMENT TECHNIQUES

§8-1 RURAL CLUSTERING

§8-2 CORRIDOR MAP

§8-3 DEVELOPMENT AGREEMENT

§8-4 MAJOR PERMIT

§8-5 INTERIM DEVELOPMENT REGULATIONS

§8-6 AFFORDABLE HOUSING

§8-1 RURAL CLUSTERING

§8-1-1 TITLE

§8-1-2 PURPOSE AND INTENT

§8-1-3 DEFINITIONS

§8-1-4 APPLICABILITY

§8-1-5 RURAL CLUSTER MANDATE

§8-1-6 RELATIONSHIP TO LAND SUBDIVISION REGULATIONS

§8-1-7 DESIGN REQUIREMENTS RURAL CLUSTERS AND
CLUSTER LOTS

§8-1-8 DESIGN REQUIREMENTS FOR REMAINDER PARCELS

§8-1-9 OTHER DESIGN REQUIREMENTS

§8-1-10 RESOURCE LAND AND OPEN SPACE RETENTION

§8-1-11

RESOURCE USE MANAGEMENT PLAN

§8-1-12

OWNERSHIP AND MANAGEMENT OF RESOURCE
LAND OR OPEN SPACE

[See Commentary]

§8-1-1

TITLE

This Resolution [Ordinance] shall be known and may be cited as
the "Rural Cluster" Resolution [Ordinance] of
_____ County.

§8-1-2

PURPOSE AND INTENT

The purpose of this Resolution is to provide for small lot
residential development in agricultural, forestry, and rural
residential districts in a manner which maintains rural character,
maintains and conserves larger remainder parcels, protects
and/or enhances sensitive environmental and wildlife habitat
areas, and minimizes impacts to necessary public services. This
Resolution [Ordinance] is intended to help maintain resource
lands and rural character by protecting, preserving and
conserving existing resource lands, rural landscapes, and
viewsheds. These goals are achieved by allowing the placement
of homes on a small portion of the property, while maintaining
the majority of the site in a remainder parcel which constitutes

resource land or open space. These regulations are consistent with, and are designed to implement, the goals and policies of the county's [city's] comprehensive plan as they relate to the protection of resource lands, the conservation of open spaces, and the maintenance of rural character.

§8-1-3 DEFINITIONS

Remainder parcel: The remainder parcel of the cluster provision that contains the majority of the land within the development and is devoted to open space, resource land, or other authorized use.

§8-1-4 APPLICABILITY

This Resolution [Ordinance] shall apply to all preliminary plat applications involving property in any area designated as agricultural/forestry in the county's comprehensive plan, or in any area designated for rural residential use in the county's comprehensive plan but which contains significant active agricultural or forestry operations. At its discretion, the Planning Commission may interpret this jurisdiction within a broader context, if the commission finds that public policies adopted by the local governing body support a broader jurisdiction than that stated in this section.

§8-1-5 RURAL CLUSTER MANDATE

§8-1-5.1

Planning Commission Authority. The Land Use Officer may recommend, and the Planning Commission is hereby authorized to require any applicant of a major subdivision in any area designated as agricultural/forestry in the county's

comprehensive plan, or in any area designated for rural residential use in the county's comprehensive plan but which contains significant active agricultural or forestry operations, to rearrange land subdivision proposals in a manner that complies with the purpose and intent and the specific provisions of this Resolution [Ordinance]. To this end, the Planning Commission is hereby authorized to deny a preliminary plat for property located in said agricultural/forestry or rural residential areas which does not meet the requirements of this Resolution [Ordinance]. The Planning Commission shall also be authorized to waive the requirements for minimum lot sizes, lot widths, and yards as may be required by the County's [City's] Land Use Intensity District [Zoning] Ordinance, in specific instances and upon application, but only to the minimum extent necessary to permit a cluster subdivision to comply with this Resolution [Ordinance]; provided, however, that the Planning Commission is not authorized to increase an overall gross density of development on a property that is otherwise not permitted by County [City] land use regulations.

§8-1-5.2

Additional Requirements. As part of the preliminary plat review process, the Land Use Officer or Planning Commission may require that the applicant identify agricultural, forestry, and open space land on the property proposed for subdivision. The Planning Commission may encourage efforts by the subdivider to preserve and/or promote agricultural, forest, or open space use and may require the retention of some of the usable agricultural or forest land or open spaces that meet the purpose and intent and specific provisions of this Resolution [Ordinance].

§8-1-5.3

Requirements for Denying a Preliminary Plat. To deny a subdivision plat under the authority of this Resolution [Ordinance], the Planning Commission or Land Use Officer must have informed the applicant of a rural cluster mandate and instructed the applicants on the requirements of this Resolution [Ordinance], and made a finding that the proposed preliminary plat has not been designed in accordance with the provisions of this Resolution [Ordinance] as broadly interpreted by the Land Use Officer and Planning Commission.

§8-1-5.4

Appeal. Any action by the Planning Commission's action to apply the rural cluster mandate or to otherwise invoke its authority pursuant to this chapter as applied to a specific property, upon approval of a preliminary plat requiring such mandate, may be appealed by the property owner to the Board of Appeals as provided for in Section 1.10 of this code.

§8-1-6

RELATIONSHIP TO LAND SUBDIVISION REGULATIONS

This Resolution [Ordinance] is intended to work as a special addition to the county's [city's] subdivision and land development regulations codified as Section 4-1 of this code. All requirements of said Code Section shall apply unless the context clearly indicates otherwise or unless this Resolution [Ordinance] conflicts with said code sections, in which case this Resolution [Ordinance] shall apply.

§8-1-7

DESIGN REQUIREMENTS RURAL CLUSTERS AND CLUSTER LOTS

§8-1-7.1

Density Clustering. The permitted residential development density for the property proposed to be subdivided, shall be used within cluster lots (see Figures), and the remainder parcel shall be utilized for agriculture or forest land or for open space. (Source: Arendt 1994.)

§8-1-7.2 Area of Lots. Cluster lots shall contain a minimum area necessary to meet health department requirements. Where permitted by the county health department, the cluster subdivision may consist of lots smaller than the sizes required for individual on-site sewage management systems (i.e., septic tanks), if adequate provisions are made for common drain fields (see Figure), subject to the approval of the local health department. No cluster lot shall be greater than two acres in size, so as to encourage the maximum amount of land possible preserved for resource use or open space.

Common Drain field

§8-1-7.3 Locations of Clusters.

- (a) In areas where usable agricultural land exists, residential development shall be clustered or sited so as to minimize disruption of existing or possible future agricultural uses.
- (b) A rural cluster subdivision may contain one or more residential clusters grouped into compact neighborhoods.
- (c) To the maximum practicable extent, existing historic rural features shall be preserved as part of the cluster development. These features include but are not limited to rock walls, fences, functional and structurally safe farm buildings, monuments, and landscape features.

- (d) Buildings shall be clustered or sited in the most accessible, least visually prominent, and most geologically stable portion or portions of the site.
- (e) Rural clusters shall be limited to locations that minimize the visual impact from adjacent lands and view corridors. Placing buildings so that vegetation, rock outcroppings, depressions in topography, or other natural features will screen them where they exist shall minimize the prominence of construction. In wooded or forested areas, the Land Use Officer may recommend and the Planning Commission may require the scattering of buildings so as to save trees and minimize visual impacts.

Rural Cluster Locations

- (f) Cluster lots shall be sited to minimize conflicts between housing and adjacent agricultural or forest zoned property.
- (g) All cluster lots should be located on the least productive soils, but they should not include environmentally sensitive areas unless no other alternative exists. If no alternative is available, encroachment into prime agricultural soils or environmentally sensitive areas shall be limited to the least amount possible.
- (h) Cluster lots should border on open space on at least one side, and have access to any core open spaces in the rural cluster.

§8-1-8 DESIGN REQUIREMENTS FOR REMAINDER PARCELS

The cluster development shall result in the establishment of a remainder parcel comprising a minimum of 40 percent of the land area to be subdivided. Any remainder parcel shall be contiguous except in the most unusual circumstances. Any remainder parcel shall not be fragmented by public or private road easements unless no other reasonable alternative exists. To the maximum extent possible, all environmentally sensitive

areas on property proposed for subdivision shall be located within the remainder parcel. To retain the rural character, the remainder parcel should contain to the maximum extent possible forested areas, active agriculture, meadows, pastures, and prominent hillsides or ridges if they exist.

§8-1-9 OTHER DESIGN REQUIREMENTS

Subdivision identification monuments shall not be permitted unless approved by the Planning Commission, and only in such cases as the monument retains the rural or resource character of the area. This shall not be construed to prohibit landscaping at the entrance of a rural cluster subdivision.

Sight obscuring fences are not permitted within 50 feet of the public right-of-way, nor along cluster lot lines adjacent to any remainder parcel.

§8-1-10 RESOURCE LAND AND OPEN SPACE RETENTION

Active agricultural or forest land, or agricultural or forest land not presently in use, may be preserved in its current use or proposed to be made available on a lease basis in the future for compatible agricultural or forestry uses. The primary intent shall be to preserve open lands for agricultural or forest use, not to provide open space/recreational land uses which will interfere or be in conflict with agricultural or forestry operations.

The Planning Commission shall require that any such resource lands or open spaces to be preserved be shown on the preliminary and final plat as required by Section 4-1 of this code. Any areas within the subdivision which are designated on

the preliminary plat and final plat as being a common, recreation, park, open or other similar non-resource area shall be encumbered in a manner suitable to the Planning Commission to assure that such area will in some manner be beneficial to the owners of the building sites within the proposed subdivision and that said areas will not be available for development in any manner inconsistent with the intent of this Resolution [Ordinance].

to be preserved as open space may be dedicated by fee title to the County [City], subject to the approval of the Board of County Commissioners [Mayor and City Council]. If accepted in fee simple title, the county [city] or other designated public jurisdiction will maintain all open space lands accepted in fee title.

§8-1-11 RESOURCE USE MANAGEMENT PLAN

In cases where land is proposed to remain in farm or forest (i.e., resource) use, the Planning Commission shall require a farm or forest management plan for the remainder parcel to be submitted and approved prior to approval of the preliminary plat. The management plan shall describe the nature and intensity of large scale agricultural or forestry uses, permitted uses and management of the parcel so that it maintains its resource other designated functions. The management plan shall identify the responsibility for maintaining the remainder parcel. The plan shall also include any construction activities (trails, fencing, agricultural buildings) and vegetation clearing that may occur on-site. All subsequent activities must be conducted in conformance with the approved management plan.

§8-1-12 OWNERSHIP AND MANAGEMENT OF RESOURCE LAND OR OPEN SPACE

The Planning Commission may require the creation of a homeowner's association or other organization for ownership and maintenance of lands to be preserved for agriculture, forestry, and/or open space use (i.e., remainder parcels). Land

3. **American Planning Association**
Model Smart Growth Land Development Regulations
4.7 MODEL RESIDENTIAL CLUSTER DEVELOPMENT ORDINANCE
Interim PAS Report
March 2006

LandChoices

Checklist for Preserving Clean Water, Natural Areas, Wildlife and Working Farmland (www.landchoices.org)

1. Inexpensive Preliminary Sketch Plan

Include a sketch plan of greenway land, potential house sites, street alignments, and tentative lot lines, prepared according to the four-step design process for creating conservation subdivisions showing areas of proposed development and areas of proposed conservation.

This is to be prepared by a landscape architect or physical planner as the first layout document BEFORE expensive and highly detailed design drawings are created for the Preliminary Plan stage. This way any deficiencies can be corrected PRIOR to submission of the detailed, expensive Preliminary Plan.

The sketch plan is a carefully drawn rendition, done to a specific scale, and usually created as an Overlay Map to be lain on top of the underlying Existing Features/Site Analysis Map. They are always best done when done by hand, not on a computer screen.

They can be done in the field, or right afterwards, at a "mini-charrette" involving all parties concerned.

2. Conduct a Site Walk On the Property

Include all involved in the process-the developer, planning commission members, abutting landowners, officials, staff, etc.
- BEFORE any engineering plans are put into place in order to point out the conservation areas to be preserved.

Important Note: Site walks should be advertised in the usual manner as informal Work Sessions, open to the public, at which no votes or binding decisions are taken. Site walks do not add more time, as they help the process move far more quickly, since people are no longer talking and arguing about abstract lines on paper, but real slopes, actual trees, etc., which means they really understand the site conditions. There is no substitute whatsoever for seeing the land first-hand.

3. Qualified Landscape Architect and Physical Planner Experienced in Designing Conservation Subdivisions be Involved from the Beginning of the Project

This is absolutely necessary.

In the book *Envisioning Better Communities* by Randall Arendt (American Planning Association, 2010, page 21), Arendt writes, "subdivision regulations typically suffer from five fundamental flaws, resulting in flawed designs." Flaw #4: "Layouts are typically prepared by surveyors and engineers who are trained in recording site data and in street and drainage issues. They have little or no expertise in the fields of landscape architecture or neighborhood design and therefore often fail to capitalize on the significant physical, historic, and environmental features of each property."

4. Existing Features Site Analysis Map

The official time clock for review starts with the submission of this plan at the on-site walkabout or at a regularly scheduled meeting of the Planning Commission.

More Information on Methods in the First Four Steps (steps 1-4) ["Flawed Processes, Flawed Results, and a Potential Solution"](#) (PDF) (5 pages)(PDF) (5 pages)

5. Safer, Less-Wide Streets

Allow safer, less-wide streets, eliminate curb and gutters (use swales instead to absorb excess water, along with rain gardens) to lower costs, recharge groundwater, and reduce storm water runoff and pollution. Learn More at [Greener Streets: Enhancing Livability and Neighborhood Values through Greener Engineering Practices](#) (PDF)

6. Preserve a Minimum of 50%² of the BUILDABLE Land

This is in addition to the unbuildable wetlands, steep slopes and floodplains in new subdivisions.

7. Conservation Subdivision Design*

Implement Conservation Subdivisions into your ordinance
Download the following for further reference:

[LandChoices' approved conservation subdivision ordinance](#)*(doc) (61 pages) (417k) Courtesy of Walworth County, WI

[Ordinance Amendments](#) (Doc.) (2 pages)

[Conservation Subdivision Design: A Brief Overview](#) (PDF)

[Case Study: Indian Walk](#) (PDF) (2 pages)

[Case Study: West Vincent Township](#) (PDF) (2 pages)

*LandChoices does not warrant that this provision complies with your state's laws. As such you are advised to consult with an attorney that is familiar with your state's laws.

8. Conservation Subdivisions Designated as a "By-right Permitted Use" option

Designate conventional subdivision layouts as "Conditional Uses" or "Special Exemptions".

9. Create Interconnected Open Space Networks

Link together the conserved land in conservation subdivisions.

² In urban, sewerred, high density areas zoned at 2-3-4 units per acre, preserving 30-35% open space, in addition to the unbuildable wetlands, floodplains, and steep slopes, is the norm. In rural, suburban edge areas at densities of 5 and 10 acres per dwelling, where most of America's new subdivisions are being and will be built, easily 70% (or more) of the land can be preserved.